

UNITED STATES PATENT AND TRADEMARK OFFICE
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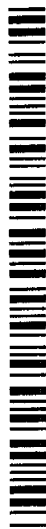
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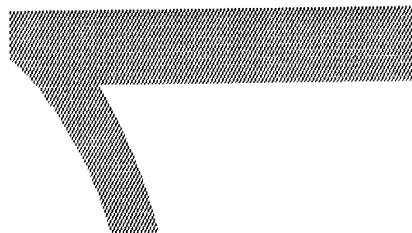
As-Perfected Follow-on Papers

Level -1
Version 1.1

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Transmittal



Level - 2
Version 1.1



VOS-30

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent Application

Applicants : Leszek Wojnowski et al.
Application No. : 10/070,587
Confirmation No. : Not yet assigned
Filed : March 8, 2002
For : POLYMORPHISMS IN THE HUMAN CYP3A4
AND CYP3A7 GENES AND THEIR USE IN
DIAGNOSTIC AND THERAPEUTIC
APPLICATIONS
Group Art Unit : Not Yet Assigned
Examiner : Not yet assigned

New York, New York
April 8, 2002

Hon. Commissioner for Patents
P.O. Box 2327
Arlington, Virginia 22202
Attention: BOX PGPUB DRAWINGS

TRANSMITTAL LETTER


Sir:

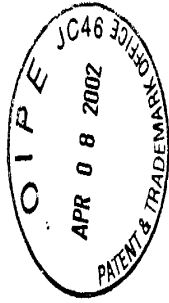
Transmitted herewith: [☒] Petition Under 37 C.F.R.
§ 1.182 for Entry of the Drawings; [☒] 9 Sheets of Formal
Drawings; [☒] a check for \$130.00; to be filed in the above-
identified patent application.

Express Mail Label
No. EV 045437017 US

The Director is hereby authorized to charge any additional fee due, or credit any overpayment, in connection with this Petition, to Deposit Account No. 06-1075. A duplicate copy of this letter is enclosed herewith.

Respectfully submitted,


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Shawn-Marie Mayrand (Reg. No. 48,986)
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APPLICATIONS

04/11/2002 MBERREMI 00000046 10070587
01 FC:632 130.00 OP

Group Art Unit : Not Yet Assigned

Examiner : Not yet assigned

New York, New York
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Hon. Commissioner for Patents
P.O. Box 2327
Arlington, Virginia 22202

Attention: BOX PG PUB DRAWINGS

04/11/2002 MBERREMI 00000046 10070587
01 FC:632
PETITION UNDER 37 C.F.R. § 1.182
FOR ENTRY OF THE DRAWINGS

130.00 OP

Sir:

Pursuant to 37 C.F.R. § 1.182, applicants hereby
petition for entry of the enclosed drawings (9 sheets) in the
publication of this patent application. A check in the amount
of \$130.00, in payment of the fee set forth in 37 C.F.R. §
1.17(h), is enclosed herewith.

Express Mail Label
No. EV 045437017 US

The drawings submitted herewith are identical to the drawings submitted on March 8, 2002. This submission does not constitute new matter.

The Director is hereby authorized to charge any additional fee due, or credit any overpayment, in connection with this Petition, to Deposit Account No. 06-1075. A duplicate copy of this Petition is enclosed herewith.

Respectfully submitted,

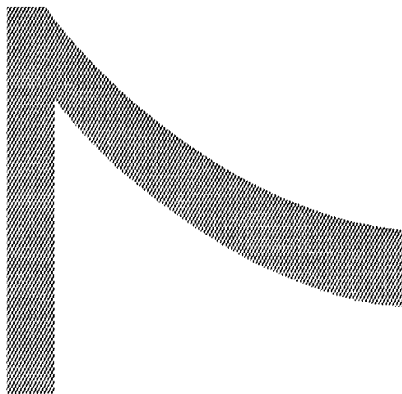


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Drawings



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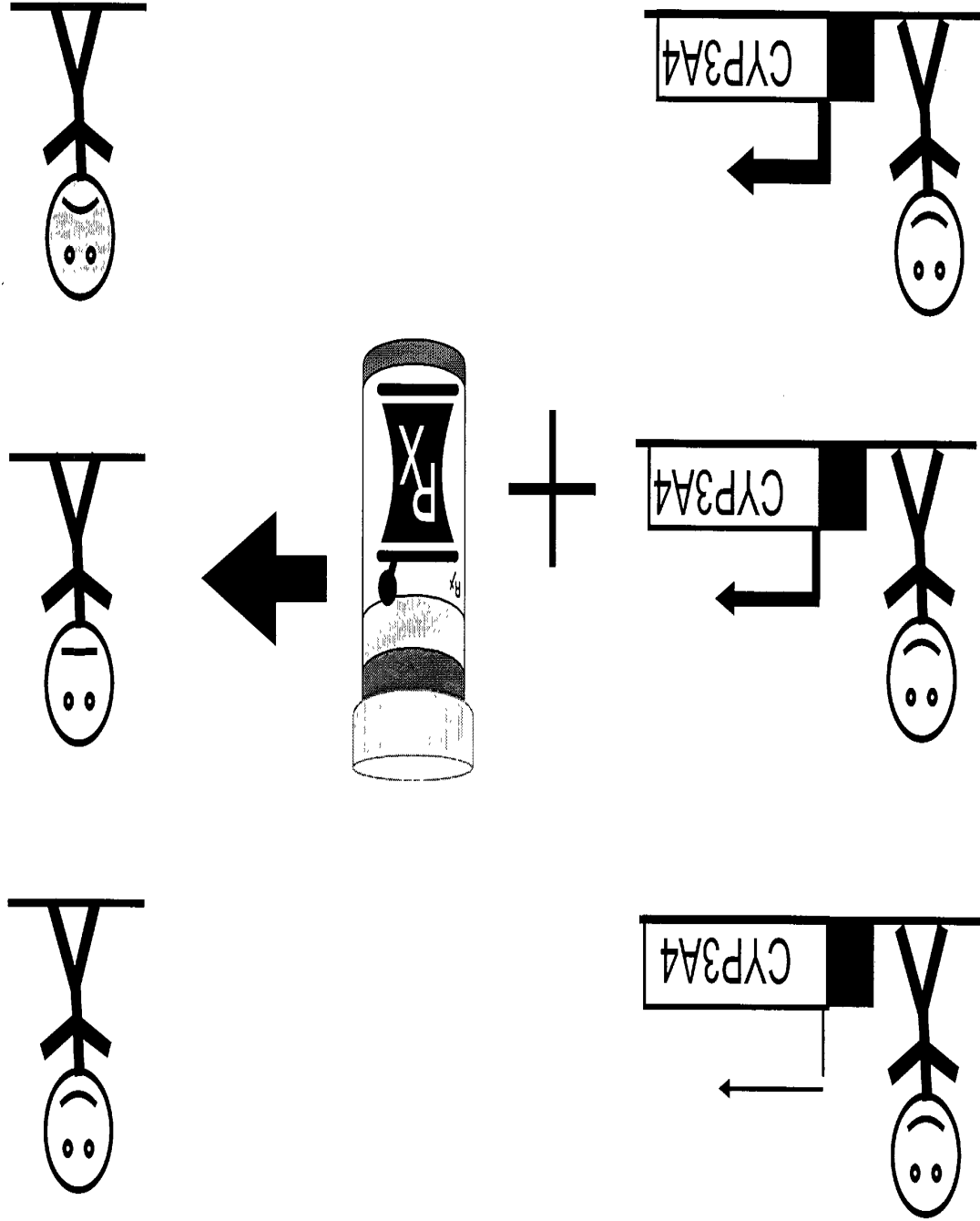


Fig. 1

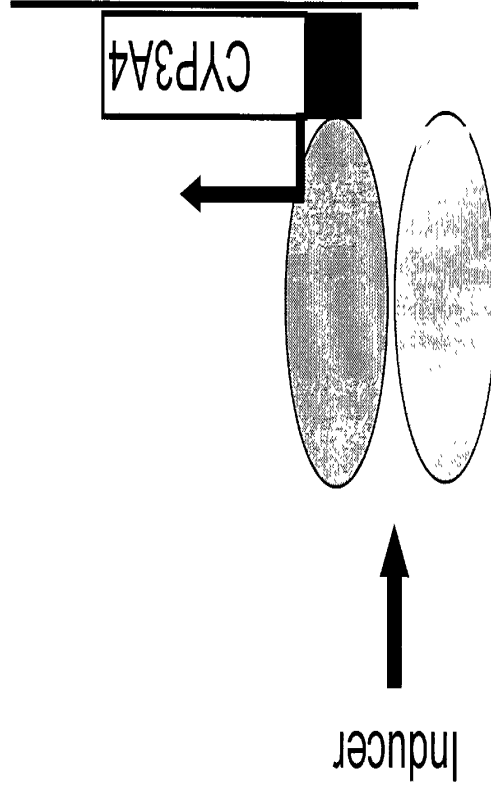


Fig. 2

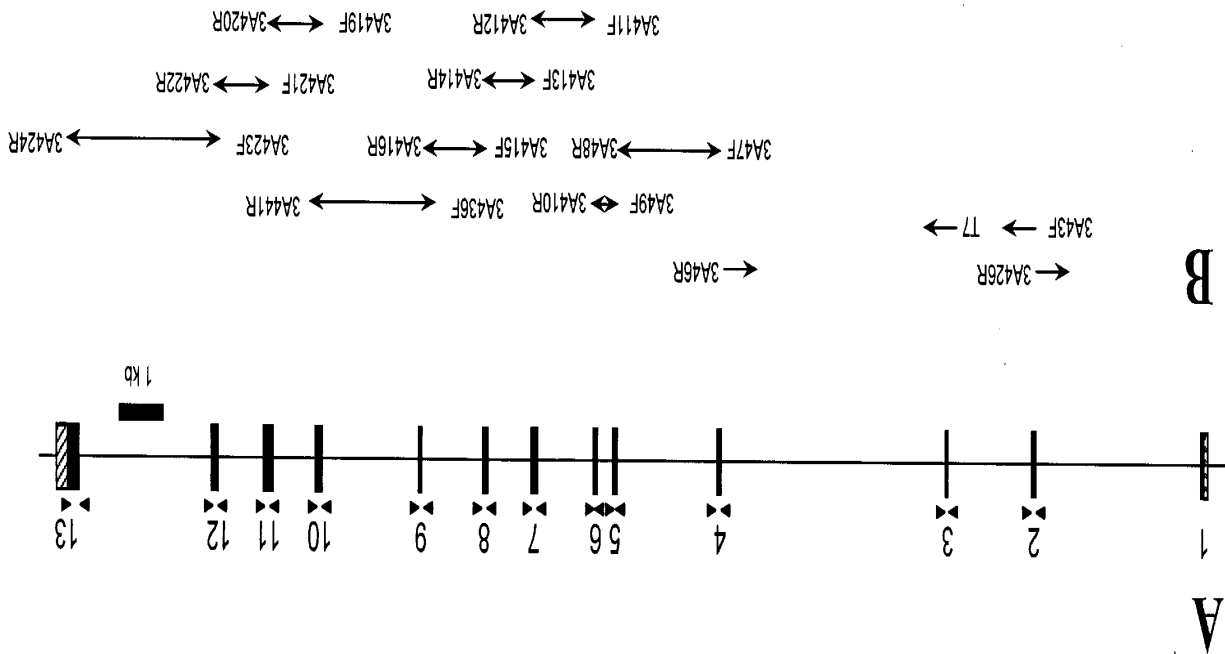


Fig. 3

CYP3A4 polymorphisms

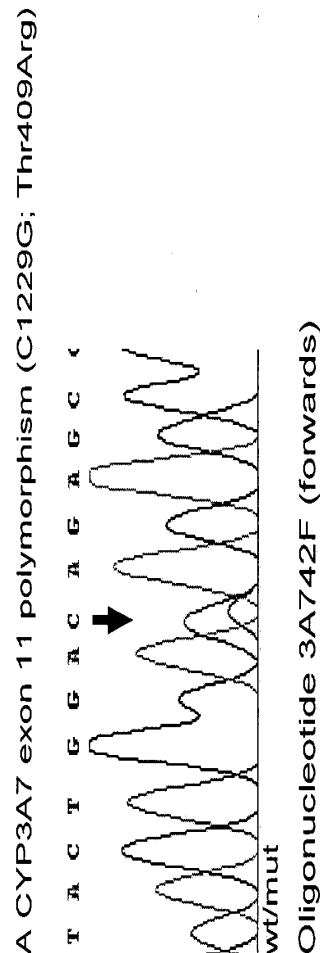
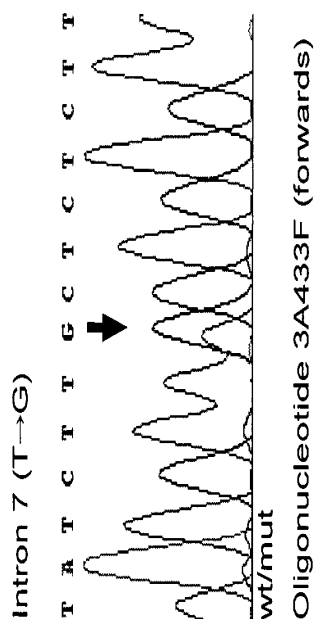
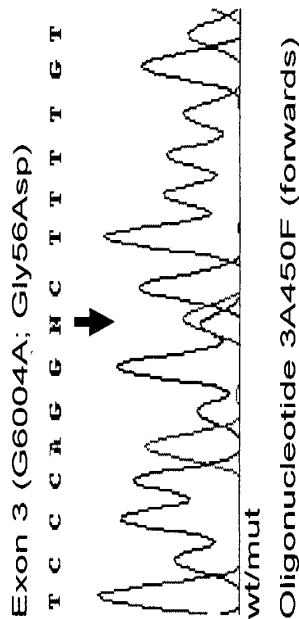
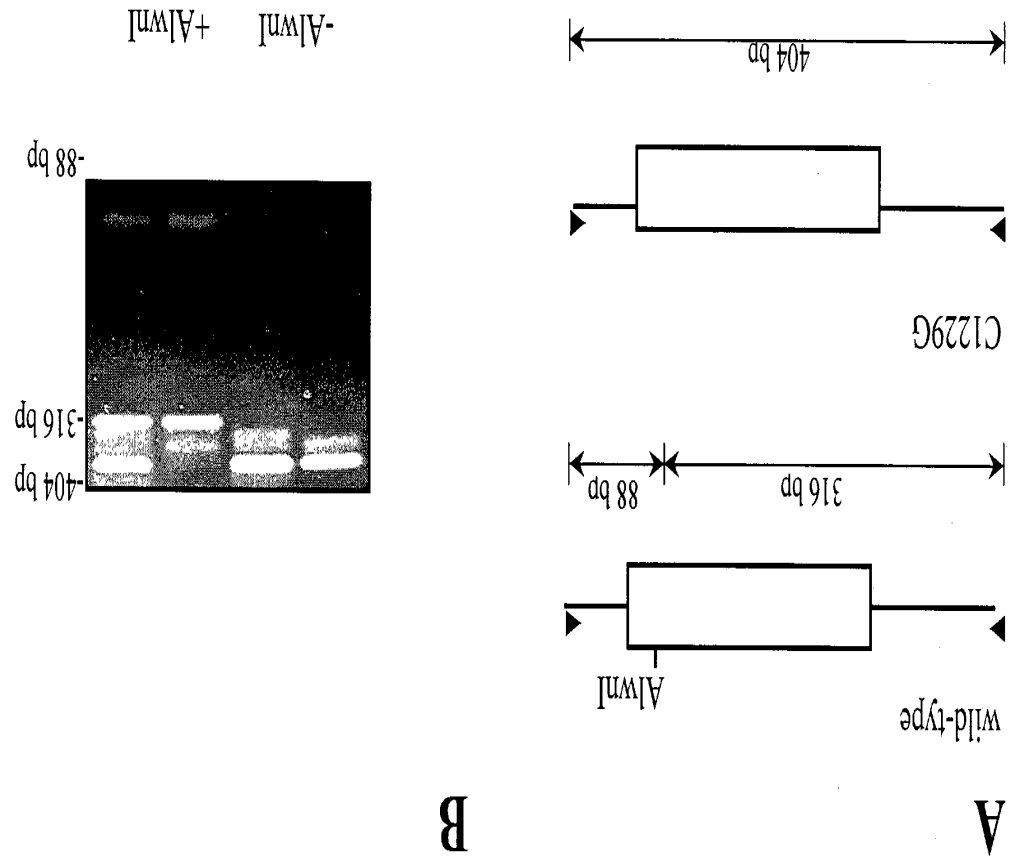


Fig. 4

Fig. 5



CYP3A4

Exon 3 (g.6004G>A, G56D)

CCCTTAAGTGCAGCAAGTCTGATTTTCATTGGCTTCGACTGTTTTTCAT→CCCCAATTAGAGGCAG
GGTTAAGTACATTAAATAATAATCAATATTATTGTTCTCCTCCAGG→ACTTTTGTATGT
TTGACATGGAAATGTCATAAAAGATGGAAGTGTGGGGTGAGTATTCTGGAAACTTCCATT
GGATAGACTTGTTCATGATGAGTTTACCCCACTGCACAGAGACAGTCTCAGCCC

Exon 4 (Primer 3A4-52F and 3A4-37R)

AGTCTGGCTTCCTGGGTTGGGCTCCAGCTGTAGAAATAAGGCTGTTGATGTTTAA
TCAACTCTGTTTTTTTTCACACAGCTTTTATGATGTGTAACAGCCTGTGCTGGCTA
TCACAGATCCTGACATGATCAAAACAGTGCTAGTGAAGAATGTTATTCTGTCT
TCACAAACCGGAGGGAAGCATTTCATGTGTTGAATTAATAACTGATTGATTAA
ATTTATATTTTGAAATTTCTTATATATTATAGACAGTTGCCCTAAAAAATGTCACGG
AAGGTTCCACGTCACCTTC

Exon 5

CTACAACCATGGAGACCTCCACAACCTGATGTAGGACAAAAATGTTTCTGCTTTGAA
CTCTAGCCCTTTTGGTCCAGTGGGATTTATGAAAAGTGCCATCTCTATAGCTGAG
GATGAAGAATGGAAGAGATTACGATTCATTGCTGTCTCCAACTTCACCCAGTGG
AAACTCAAGGAGGTATGAAAAATAACATGAGTTTTTAATAAGAAACTTTAAAGAAATG
AATCTGGTGGGACAGGTA

Exon 7 (g.15753T>G)

GTCTGTCITGACTGGACATGTGGCTTTCCCTGATGCACGCATAGAGGAAGGATGG
TAAAAGGTGCTGATTTTAAATTTCCACATCTTTCCACACTCAGCGTCTTTGGGG
CCTACAGCATGGATGTGATCACTAGCACATCATTTGGAGTGAACATCGACTCT
CTCAACAATCCACAAGACCCCTTTGTGGAACAACACCAAGAAAGCTTTTAAAGATT
TGATTTTGGATCCATTCTTCTCTCAATAAGTATGTGACTACTATTTCCTTTT
ATTTATCTTTI→GCTCTCTTAAAAATAACTGCTTTATTGAGATATAAATCACCATGT
AATTCATCCACTTAAATAATACAGTTTCAGTGATTTGTAGTACATTTGAAGATATGT
GTGACCATCATC

Exon 9

GGAGATCAAGGACCAACGCTTGTGATTTACTTCTGACTTCAGGAGCCACTTTCTG
TCAGTGAAATTTCTCTTTTGTCTTAGCACCGAGTGGATTTCCTTCAGCTGATG
ATTGACTCTCAGAAATTCAAAAGAACTGAGTCCCAAGGTAACCAAGAGTGT
TTCTGAGGGCTACTTGTGGGGCACTCAGAGGGAGGCCCTTGTCTGAAAATGTG
CAGGAAGTATTCAGGATGATGAG

CYP3A7

Exon 11 (C1229G Thr409Arg polymorphism)

CCAGTATGAGTTGTTCTCTCTGGAACTTCTAACAGTTCAACAGTACTACATGGACTG
AGTTAAAGTTAATTCAAAATCTCAATTCATCCAAATCTGTTTCTTTTTCAGG
CACCACCCACTATGATACTGTGCTACAGTTGGAGTATCTTGACATGGTGTG

Fig. 6

AATGAAACACTCAGATTATTCCCAAGTTGCTATGAGACTTGAGAGGGTCTGC
 AAAAGATGTTGAAATCAATGGGATGTTTATTCCTCCAAAGGGGTGGTGATGA
 TTCCAAAGCTATGTTCTTCATGACCCCAAGTACTGGAC→GAGAGCCTGAGA
 AGTTCCTCCCTGAAAGGTAGGAGGCCCCCTGGGAAAGGAGCCCTCCCTGAACC
 AGCCTGGTTCAAGCATAATTCTGCCT

CYP3A4

Exon 4 (Primers 3A4-52F and 3A4-100R)

AGTCTGGCTTCCCTGGGTTGGGCTCCAGCTGTAGAATAAGGCTGTTGATGTTAA
 TCAACTCTGTTTTTTTTCACACAGCTTTTATGATGGTCAACAGCCTGTGGCTA
 TCACAGATCCTGACATGATCAAAACAGTGCTAGTGAAGAATGTTATTTCTGTCT
 TCACAAACCGGAGGGIAGCATTCATGTTGAAATTAATAACTGATTGATTAA
 ATTTATATTTTGAAATTTCTTATATATTCATAGACAGTTGCCCTAAATAATGTCCAGG
 AAGGTTCCACGTCCTCATCTGTCCTC

Exon 5 (g.13908G>A, R130Q)

CTACAAACCATGGAGACCTCCACAACTGATGTAGGACAAAAATGTTTCTGCTTTGAA
 CTTAGCCCTTTGGTCCAGTCCAGATTTATGAAGAAGTGCCATCTCTATAGCTGAG
 GATGAAGAAATGGAAGAGATTACG→AATCATTTGCTGTCTCCAACCTTCACCCAGT
 GGAAACTCAAGGAGGTATGAATAAACAATGAGTTTAAATAAGAAACTTAAAGA
 ATGAATCTGGTGGGACAGGTA

Exon 6 (g.14292G>A, V170I; g.14304G>C, D174H; g.14323C>T; g.14329G>T; g.14357T>G)

CCCTTTCCAAAGGGTAGTCCACTGAATTTGAGCTGCCCTAAATAATGGTCTTTTATC
 TTTATGTACAGAAACACATCACAAAAATTCATTATAAAATGTCACCTTAACTGCTCCA
 TGCTGGGGAAAGCCATGTCTCTGGACTAGAGTCTGCACATTTAACTATGGG
 TGGTGTGTGTTTGTGCTTAGTGGTCCCTATCATTTGCCCAGTATGGAGATGT
 GTTGGTGAGAAATCTGAGGGGGAGCAGAGACAGGCAAGCCTG→ATCACCC
 TTGAAAG→CAGTAAAGTAGAAGCGCAGCC→TATGGGG→TTTCTGAGCTGTCTAT
 GAACCCCTCCAGCT→GGCCTGCCATGGAGCTGATATTCCTGCTGTGGGTTAT
 TCCAGTGACCAAGAC

Exon10 (g.20230G>A)

CCCAGTGTACCTCTGAATTGGCTTTTCTATTCTTTTCCCTTAGGGATTTGAGGGCT
 TCACCTTAGATTTCTCTCATCTAAACTGTGATGCCCTACATTGATCTGATTTACCT
 AAAATGTCTTCTCTCTCTTTCAGCTGTCCGATCTGGAGCTCGTGGCCCAAT
 CAATTATCTTTATTTTGTGCTGCTATGAACCAACGAGCAGTGTCTCTCTTCAT
 TATGTATGAATGGCCACTCACCTGTATGTCAGCAGAACTGCAGGAGGAA
 ATTGATGCAGTTTACCCCAATAAGGTGAGTGGATGG→ATACATGGAGAGGAG
 GGAGGAGGTGAAACCTTAGCAAAAATGCCCTCCTCACCACTTCCAGAGAAATTT
 TTATAAAAGCATAATCACTGATTCTTTCACTGACTCTATGTAGGAAGGCTCTG

Fig. 6 cont.

Exon 11 (g.21867C>T, T363M; g.21868G>A; g.21896C>T, L373F; g.22026C>T, P416L; g.22041C>T;)

CAGTATGAGTTAGTCTCTGGAGCTCCTAATACTTCAATGACTGACTGGACTGA
 GTTAAAGATTAAATTCAAAATCTCAATTTATCCAAATCTGTTTCGTTCTTTCCAGGC
 ACCACCCACCTATGATACGTGCTACAGATGGAGTATCTTGACATGTTGGTGA
 ATGAAAC→TG→ACTCAGATTATCCCAATTGCTATGAGAC→TTTGAGAGGGT
 CTGCAAAAAGATGTTGAGATCAATGGGATGTTCAATTCCTCCAAAGGGGTGGTGG
 TGATGATTCACAGCTATGCTCTTCACCGTGACCCAAAGTACTGGACAGAGCCT
 GAGAAATTCCCTCC→TTGAAAGGTAACAAGGC→TCCCTGGGAAGGAGCCCTC
 CCTGAACCCAGCCTGGTTCAAGCATATTCTGCCCTCTTAATCTACAGGACAGTCA
 TGTGTTGTATAAATTTATTTGCTTGTATTTTATATTAGAGATTTTTTAAATCATCA
 AATTGATTATTGTACACACTTTACAAACCATAGACTAGAAAAGAAAGAACTACAGTC
 ATCCACAATTCACAACACTTACGATGAAGTCAATCAGTTATG

Exon 12 (g.23081C>T)

CCTGTGTACTACTAGTTGAGGGGTGGGCCCTTAAGTAAGAAACCCTAACATGTAA
 CTCTTAGGGGTATTATGTCAATTAACCTTTTAAATCTACCAC→TGTGGAACCA
 GATTCAGCAAGAAACAAGACAATAGATCCTTACATATACACACCTTT
 GGAAGTGGACCCAGAACTGCAATGGCATGAGTTTGGCTCTCATGAAACATGAA
 ACTTGCTCTAATCAGAGTCTCTTCAGAACTTCTCCTTCAAACTTGTAAAGAAAC
 ACAGGTTAGTCAATTTTCTATAAAATAATGTTGTATTAAATAATCTTTAACTGA
 GTGGTCTGTATTTTAAAGAAATATGCTTGTATTAACTTTTAACTTTTGTCTC
 TGGGCCAAAGAAATCAATTAGGCCCATCTGTG

this oligonucleotide used for genotyping differs from the genomic sequence at the positions shown in italics

Exon 13 (g.25925C>T; g.25958T>G)

GGAGTGTCTCACTCACTTGTGATGCTATACCTTTCTACTTTTGTATTATTAATGCTTC
 TCAATATGCTTGTTTAACTGTGTCAGATCCCCCTGAAATTAAGCTTAGGAGGAC
 TTCTTCAACCAAGAAACCCGTTGTTCTAAAGGTTGAGTCAAGGGATGGCACCC
 →TGTAAAGTGGAGCCCTGAATTTTCTTAAGGACTTCT→GGCTTTGCTCTTCAAGAA
 ATCTGTGCCTGAGAACACCCAGAGACCTCAAATTACTTTGTGAATAGAACTCTGAA
 ATGAAGATGGGCTTCATCCA

Fig. 6 cont.

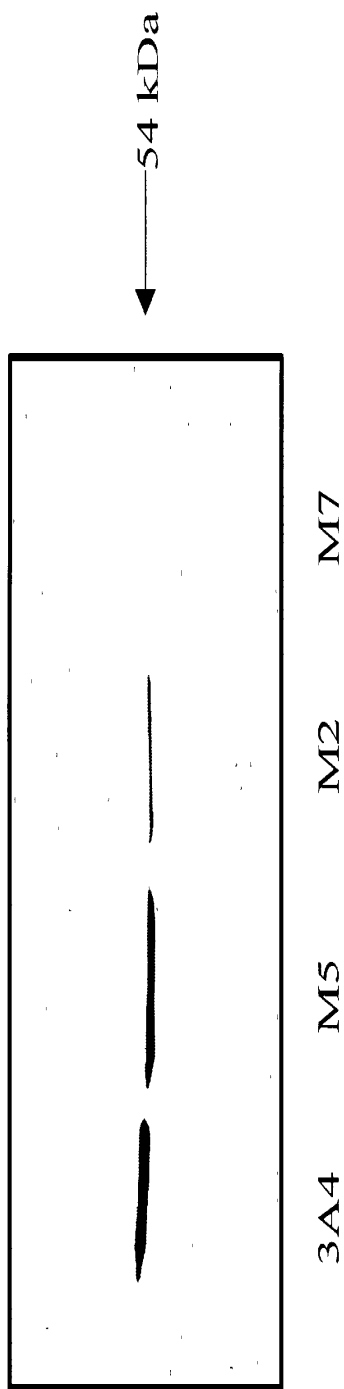
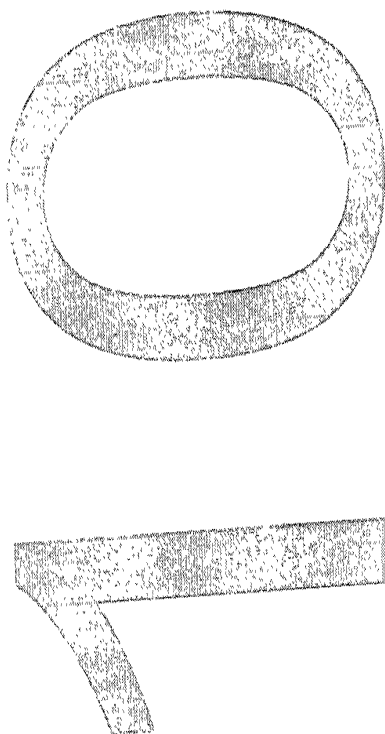


Fig. 7

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Miscellaneous



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Version 1.1
Updated - 8/01/01



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Commissioner for Patents
Washington, DC 20231
www.uspto.gov

4/29/02

Fish and Neave
1251 Avenue of the Americas
New York NY 10020-1104

Dear Applicant:

The Box PGPub replacement drawings for application number 10/070,587 received on 4/8/02 by the U. S. Patent and Trademark Office will be included for patent publication.

Telephone inquiries should be directed to Customer Service, Office of Initial Patent Examination, at 703-308-1202.



1944-1945

Commissioner for Patents
Washington, DC 20231
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Y. Durbani

Signature of Reviewer, Office of Initial Patent Examination

